RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER
QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation
DT1241 02/2011

INSTRUCTIONS:
Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

WisDOT research program category: ☐ Policy research ☒ Wisconsin Highway Research Program ☐ Other ☐ Pooled fund TPF#		Report period year: 2014 ☒ Quarter 1 (Jan 1 – Mar 31) ☐ Quarter 2 (Apr 1 – Jun 30) ☐ Quarter 3 (Jul 1 – Sep 30) ☐ Quarter 4 (Oct 1 – Dec 31)
Project title: Laboratory Study of High Performance Curing Compounds for Concrete Pavement-Phase II		
Project investigator: Steven Cramer	Phone: 608-265-2001	E-mail: cramer@engr.wisc.edu
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WisDOT project ID: 0092-11-05	Other project ID:	Project start date: 9/1/2012
Original end date: 9/30/2014	Current end date: 9/30/2014	Number of extensions: 0

Project schedule status:
☐ On schedule ☐ On revised schedule ☐ Ahead of schedule ☒ Behind schedule

Project budget status:

Total Project Budget	Expenditures Current Quarter	Total Expenditures	% Funds Expended	% Work Completed
$150,004.00	$21,137.00	$79,169.00	53%	70%

Project description:
The primary objective of this study is to determine the effect that the presence of bleed water on the surface of concrete has on the effectiveness of curing compounds with regards to freeze-thaw surface durability and to provide recommendations on when curing compounds should be applied. A secondary objective of this study is to determine the repeatability of in assessing curing compound performance and to identify the trade-offs in curing compound performance with regards to surface durability.

Progress this quarter (includes meetings, work plan status, contract status, significant progress, etc.):
Substantially all of the specimens specified in the work plan have been manufactured to date and approximately 45% of all freeze-thaw specimens have completed their 60 ASTM C672 exposure cycles. Preliminary analysis of the data shows some consistency and lack thereof with prior research. The team initiated preparation of more than several duplicate specimen sets to further explore issues around repeatability.

Anticipated work next quarter:
Freeze thaw testing will continue during the quarter with corresponding data collection and analysis. Preliminary report preparation will commence.

Circumstances affecting project or budget:
A significant push to produce research specimens occurred the past quarter and helped us move closer to the original project schedule. None-the-less, as previously reported, the Biotron facility is being renovated and this hasresulted in several service disruptions in the freeze-thaw testing. We do not believe the service disruptions have influenced the

integrity of the tests but we monitor this situation closely. For extended service disruptions we have plans to move the specimens to a freezer to hold them in state of stasis. This project remains more than several months behind schedule.

Attach / insert Gantt chart and other project documentation

See attached Gantt chart.

FOR WISDOT USE ONLY

Staff receiving QPR:	Date received:
Staff approving QPR:	Date approved: